

**Amendments to the Specification**

Please amend the title as follows:

Compositions Of Matter, ~~Semiconductor Devices, And Semiconductor Processing~~  
Methods and Barrier Layer Compositions

At page 1, before the "Technical Field" section, please insert the following new paragraph.

RELATED PATENT DATA

This patent resulted from a continuation of U.S. Patent Application Serial No. 09/641,826, filed on August 17, 2000, which is a divisional application of U.S. Patent Application Serial No. 09/219,041, which was filed on December 23, 1998.

Please amend the paragraph at page 1, lines 10-14 as follows:

The invention pertains to compositions of matter comprising silicon bonded to both nitrogen and ~~inorganic~~ an organic material. The invention further pertains to semiconductor devices incorporating the above-described compositions of matter, and to methods of forming semiconductor devices. In particular aspects, the invention pertains to semiconductor devices incorporating copper-containing materials, and to methods of forming such devices.

Please amend the paragraph at page 9, lines 3-14 as follows:

An exemplary reaction is to combine methylsilane ( $\text{CH}_3\text{SiH}_3$ ) with ammonia ( $\text{NH}_3$ ) in the presence of a plasma to form  $(\text{CH}_3)_x\text{Si}_3\text{N}_{4-x}$ . The exemplary reaction can occur, for example, under the following conditions. A substrate is placed within a reaction chamber of a reactor, and a surface of the substrate is maintained at a temperature of from about  $0^\circ\text{C}$  to about  $600^\circ\text{C}$ . Ammonia and methylsilane are flowed into the reaction chamber, and a pressure within the chamber is maintained at from about 300 mTorr to about 30 Torr, with a ~~plasm~~ plasma at radio frequency (RF) power of from about 50 watts to about 500 watts. A product comprising  $(\text{CH}_3)_x\text{Si}_3\text{N}_{(4-x)}$  is then formed and deposited on the substrate. The reactor can comprise, for example, a cold wall plasma reactor.